

What is Claimed is:

1. A composition for placement in a mammalian body comprising:
 - a) a non-reactive biocompatible substance which is insoluble in blood or other body fluid of a mammal;
 - b) a sufficient amount of rheological modifier to permit the composition to exhibit thixotropic behavior; and
 - c) a biocompatible liquid that is miscible in blood or other body fluid.
2. A composition for placement in a mammalian body comprising:
 - a) a non-reactive biocompatible substance which is insoluble in blood or other body fluid of a mammal;
 - b) a sufficient amount of rheological modifier to permit the composition to exhibit thixotropic behavior; and
 - c) a contrast agent.
3. A composition for placement in a mammalian body comprising:
 - a) a non-reactive biocompatible substance which is insoluble in blood or other body fluid of a mammal;
 - b) a sufficient amount of rheological modifier to permit the composition to exhibit thixotropic behavior;
 - c) a biocompatible liquid that is miscible in blood or other body fluid; and
 - d) a contrast agent.

4. The composition according to Claims 1 or 3, wherein the biocompatible liquid is a solvent which dissolves the non-reactive biocompatible substance and/or the rheological polymer.
5. The composition according to Claims 1 or 3, wherein the non-reactive substance is either insoluble or partially soluble in the biocompatible liquid.
6. The composition according to Claims 1, 2 or 3, wherein the non-reactive substance is selected from the group consisting of biocompatible polymers, gels, waxes, beads and lipids.
7. The composition according to Claim 6, wherein the non-reactive substance is a biocompatible polymer.
8. The composition according to Claim 7, wherein the biocompatible polymer is a biodegradable polymer.
9. The composition according to Claim 8, wherein the biodegradable polymer is selected from the group consisting of polylactic acid, polyglycolic acid, copolymers of polylactic acid and polyglycolic acid, polyepsilon caprolactone, polyhydroxy butyric acid, polyorthoesters, polyacetals, polydihydropyrans, collagen and mixtures thereof.
10. The composition according to Claim 7, wherein the biocompatible polymer is a non-biodegradable polymer.

11. The composition according to Claim 10, wherein the non-biodegradable polymer is selected from the group consisting of polyethylene, ethylenevinyl alcohol copolymers, cellulose acetate, polypropylene, polybutylene, polyethylene terephthalate, , polyvinyl chloride, , polystyrene, polyamides, nylon, polycarbonates, polysulfides and polysulfones as well as copolymers, terpolymers of one or more of the foregoing.

12. The composition according to Claims 1, 2 or 3, wherein the rheological modifier is selected from the group consisting of non-particulate rheological modifiers, particulate rheological modifiers and mixtures thereof.

13. The composition according to Claims 1, 2 or 3, wherein the particulate rheological modifier is selected from the group consisting of siliceous earths, bentonite, organoclays, water-swelling clays, such as lapenite, and silicas such as fumed silica and precipitated, calcium carbonate, titanium dioxide, laminate, titanium oxide, zinc oxide, hydroxyapatite, carbon beads, dispersed fiber, magnetic materials and mixtures thereof..

14. The composition according to Claims 1, 2 or 3, wherein the non-particulate rheological modifiers is selected from the group consisting of polyacrylates, polyalkenes, polyalkyl oxides, polyamides, polycarbonates, cellulosic polymers and copolymers thereof, polydienes, polyesters, polymethacrylates, polysiloxanes, polystyrenes, polyurethanes, polyvinyl ethers, polyvinyl esters, Carbopol, acrylic polymers, cross-linked acrylic polymers, hydroxypropylcellulose, hydroxypropylmethylcellulose, oxidized polyethylene and their copolymers, polyethylene oxide, polyvinylpyrrolidone, associative thickeners, Carrageenan, carboxymethylcellulose, sodium hydroxyethylcellulose, hydroxyethylcellulose, methylcellulose, Guar, Guar derivatives, Locust Bean Gum, Xanthan Gum, and mixtures thereof.

15. The composition according to Claims 2 or 3, wherein the contrast agent is a water insoluble contrast agent.

16. The composition according to Claim 15, wherein the water insoluble contrast agent is selected from the group consisting of tantalum, tantalum oxide, tungsten, gold, platinum and barium sulfate.

17. The composition according to Claims 2 or 3, wherein the contrast agent is a water soluble contrast agent.

18. The composition according to Claim 17 wherein the water soluble contrast agents is selected from the group consisting of metrizamide, iopamidol, jothalamate sodium, jodomide sodium, and meglumine.

19. The composition according to Claim 4, wherein the biocompatible liquid is selected from the group consisting of dimethylsulfoxide, ethyl lactate, ethanol and acetone.

20. The composition according to Claim 5, wherein the biocompatible liquid is selected from the group consisting of water and oils.

21. The composition according to Claims 1, 2 or 3, wherein the composition further comprises one or more agents selected from the group consisting of thickening agents, plasticizers, radioactive agents and surfactants.

22. The composition according to Claim 21, wherein the composition comprises further comprises a radioactive agent in a sufficient amount to ablate diseased tissue.

23. The composition according to Claim 22, wherein the radioactive material is selected from the group consisting of ⁹⁰yttrium, ¹⁹²iridium, ¹⁹⁸gold, ¹²⁵iodine, ¹³⁷cesium, ⁶⁰cobalt, ⁵⁵cobalt, ⁵⁶cobalt, ⁵⁷cobalt, ⁵⁷magnesium, ⁵⁵iron, ³²phosphorous, ⁹⁰strontium, ⁸¹rubidium, ²⁰⁶bismuth, ⁶⁷gallium, ⁷⁷bromine, ¹²⁹cesium, ⁷³selenium, ⁷²selenium, ⁷²arsenic, ¹⁰³palladium, ²⁰³lead, ¹¹¹indium, ⁵²iron, ¹⁶⁷thulium, ⁵⁷nickel, ⁶²zinc, ⁶²copper, ²⁰¹thallium and ¹²³iodine.

24. The composition according to Claim 21, wherein the composition comprises further comprises a medicament.

25. The composition according to Claim 24, wherein the medicament is selected from the group consisting of an angiogenesis inhibiting compound, a steroidal or non-steroidal anti-inflammatory agent, and a thrombotic agent.

26. A method for site specific delivery of a composition into a mammalian patient's body which method comprises inserting an appropriate delivery device at a targeted site in the patient and then administering via the delivery device a composition according to any of Claims 1-3 under such conditions that a mass is formed *in vivo*.

27. A method for embolizing a selected vascular site via a catheter having a proximal and distal ends which method comprises inserting the distal end of the catheter in the selected vascular site, delivering via the catheter a composition according to any of Claims 1-3 under conditions wherein a solid mass is formed which embolizes the vascular site.

28. A method for bulking tissue via a delivery device having an ejection port which method comprises inserting the ejection port of the delivery device into the tissue to be bulked and delivering via said device a composition according to any of Claims 1-3 under conditions wherein a solid mass is formed which bulks the tissue.

29. The method according to Claim 28, wherein the tissue targeted for bulking is selected from the group consisting of suburethral tissue, the periurethreal tissue, soft tissue and sphincters such as the esophageal sphincter.

30. A method for delivery of a composition comprising a medicament into a mammalian body which method comprises inserting an appropriate delivery device at a targeted site in the patient and then administering via the delivery device a composition according to Claim 24 under such conditions that a mass is formed *in vivo*.

31. A kit of parts comprising:

- a) a composition comprising a non-reactive biocompatible substance, a sufficient amount of a rheological modifier to permit the composition to exhibit thixotropic behavior, optionally contrast agent, and optionally a biocompatible solvent that is miscible in blood or other body fluid; and
- b) a delivery device.